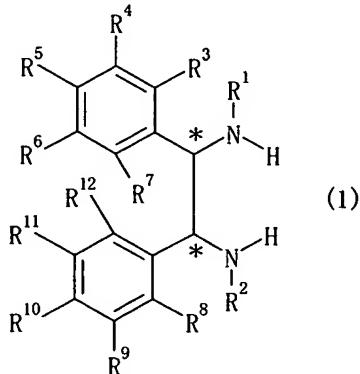


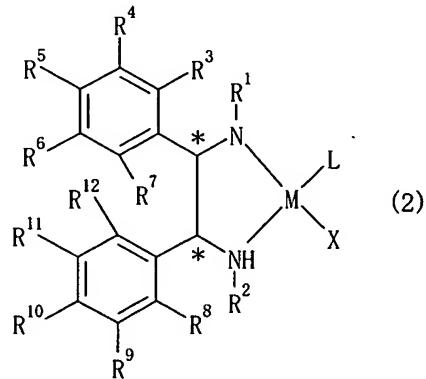
AMENDMENTS TO THE CLAIMS

[1] (original) An optically active diamine compound represented by the formula (1):



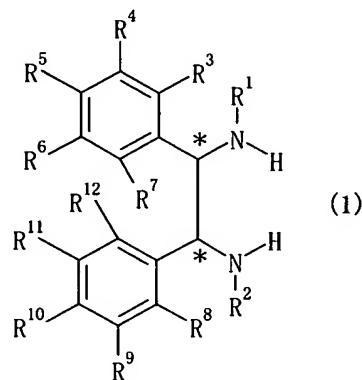
wherein R¹ and R² each independently represent a hydrogen atom, an optionally substituted hydrocarbon group, or $-\text{SO}_2\text{R}^{13}$ (wherein R¹³ represents an optionally substituted hydrocarbon group, a camphoryl group, or a substituted amino group), R³ to R¹² each independently represent a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted alkoxy group, an optionally substituted aryloxy group, an optionally substituted aralkyloxy group, or a substituted amino group, and * represents an asymmetric carbon atom, provided that at least one of R³ to R⁷ and R⁸ to R¹² is a substituted amino group.

[2] (original) An optically active transition metal-diamine complex represented by the formula (2):



wherein R¹ and R² each independently represent a hydrogen atom, an optionally substituted hydrocarbon group, or -SO₂R¹³ (wherein R¹³ represents an optionally substituted hydrocarbon group, a camphoryl group, or a substituted amino group), R³ to R¹² each independently represent a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted alkoxy group, an optionally substituted aryloxy group, an optionally substituted aralkyloxy group, or a substituted amino group, M represents a transition metal, X represents a halogen atom, L represents a ligand, and * represents an asymmetric carbon atom, provided that at least one of R³ to R⁷ and R⁸ to R¹² is a substituted amino group.

[3] (original) An optically active transition metal-diamine complex obtained by reacting an optically active diamine compound represented by the formula (1):



wherein R¹ and R² each independently represent a hydrogen atom, an optionally substituted hydrocarbon group, or -SO₂R¹³ (wherein R¹³ represents an optionally substituted hydrocarbon group, a camphoryl group, or a substituted amino group), R³ to R¹² each independently represent a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted alkoxy group, an optionally substituted aryloxy group, an optionally substituted aralkyloxy group, or a substituted amino group, and * represents an asymmetric carbon atom, provided that at least one of R³ to R⁷ and R⁸ to R¹² is a substituted amino group;

and a transition metal compound represented by the formula (3):

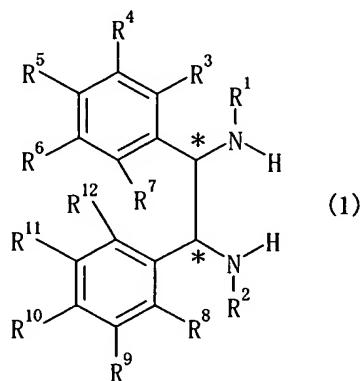


wherein M represents a transition metal, X represents a halogen atom, L represents a ligand, m represents 2 or 3, n represents 0 or 1, and p represents 1 or 2.

[4] (original) A catalyst for asymmetric synthesis comprising the optically active transition metal-diamine complex according to claim 2 or 3.

[5] (original) The catalyst for asymmetric synthesis according to claim 4, wherein the catalyst for asymmetric synthesis is a catalyst for asymmetric reduction.

[6] (original) A catalyst for asymmetric synthesis comprising an optically active diamine compound represented by the formula (1):



wherein R¹ and R² each independently represent a hydrogen atom, an optionally substituted hydrocarbon group, or -SO₂R¹³ (wherein R¹³ represents an optionally substituted hydrocarbon group, a camphoryl group, or a substituted amino group), R³ to R¹² each independently represent a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted alkoxy group, an optionally substituted aryloxy group, an optionally substituted aralkyloxy group, or a substituted amino group, and * represents an asymmetric carbon atom, provided that at least one of R³ to R⁷ and R⁸ to R¹² is a substituted amino group; and a transition metal compound represented by the formula (3):

[MX_mL_n]_p (3)

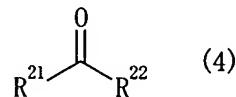
wherein M represents a transition metal, X represents a halogen atom, L represents a ligand, m represents 2 or 3, n represents 0 or 1, and p represents 1 or 2.

[7] (original) The catalyst for asymmetric synthesis according to claim 6, wherein the catalyst for asymmetric synthesis is a catalyst for asymmetric reduction.

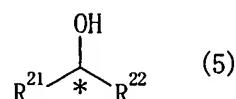
[8] (original) A process for producing an alcohol, which comprises subjecting a ketone to an asymmetric reduction in an aqueous solvent in the presence of the catalyst for asymmetric reduction of claim 5 or 7.

[9] (original) The process according to claim 8, wherein the ketone is a prochiral ketone, and the produced alcohol is an optically active alcohol.

[10] (original) The process according to claim 9, wherein the ketone is a ketone represented by the following formula (4):



wherein R²¹ and R²² each independently represent an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, or a ferrocenyl group, provided that R²¹ ≠ R²², and R²¹ and R²² may be bonded to each other to form a cyclic ketone having a substituent, and the resultant optically active alcohol is an optically active alcohol represented by the following formula (5):



wherein * represents an asymmetric carbon atom and R²¹ and R²² are the same as described above.

[11] (currently amended) The process according to claim 8~~any one of claims 8 to 10~~, wherein the asymmetric reduction is based on asymmetric transfer hydrogenation.

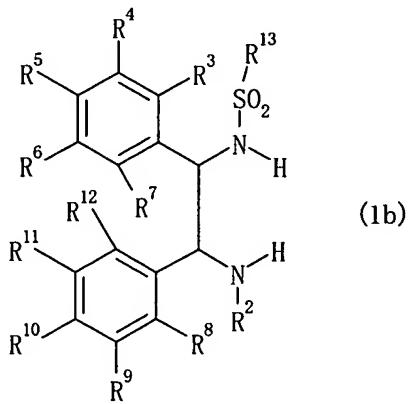
[12] (currently amended) The process according to claim 8~~any one of claims 8 to 11~~, wherein the catalyst for asymmetric reduction is recovered after use.

[13] (original) The process according to claim 12, wherein the recovery is performed in the form of an aqueous solution.

[14] (currently amended) The process according to claim 8~~any one of claims 8 to 13~~, wherein the recovered catalyst for asymmetric reduction is recycled.

[15] (original) The process according to claim 14, wherein the recovered catalyst for asymmetric reduction is a catalyst to be recycled in the form of the recovered aqueous solution.

[16] (original) A diamine compound represented by the formula (1b):



wherein R² represents a hydrogen atom, an optionally substituted hydrocarbon group, or -SO₂R¹³ (wherein R¹³ represents an optionally substituted hydrocarbon group, a camphoryl group, or a substituted amino group), R³ to R¹² each independently represent a hydrogen atom, an optionally substituted hydrocarbon group, an optionally substituted heterocyclic group, an optionally substituted alkoxy group, an optionally

substituted aryloxy group, an optionally substituted aralkyloxy group, or a substituted amino group, and R¹³ represents an optionally substituted hydrocarbon group, a camphoryl group, or a substituted amino group, provided that at least one of R³ to R⁷ and R⁸ to R¹² is a substituted amino group.